

Technical Data Sheet

## Ferrex GPP20CF69UL-WH

Polypropylene  
LyondellBasell Industries  
Engineering Plastics

| General                |                                           |              |               |
|------------------------|-------------------------------------------|--------------|---------------|
| Filler / Reinforcement | • Calcium Carbonate, 20% Filler by Weight |              |               |
| Features               | • Good Processability                     | • High Gloss | • Homopolymer |
| Uses                   | • Appliances                              | • Handles    | • Housings    |
| Appearance             | • White                                   |              |               |
| Forms                  | • Pellets                                 |              |               |
| Processing Method      | • Injection Molding                       |              |               |

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|-------------------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity                | 1.07                    | 1.07 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg) | 20 g/10 min             | 20 g/10 min            | ASTM D1238  |

| Mechanical                 | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (Yield)   | 4400 psi                | 30.3 MPa           | ASTM D638   |
| Tensile Elongation (Break) | 55 %                    | 55 %               | ASTM D638   |
| Flexural Modulus           | 245000 psi              | 1690 MPa           | ASTM D790   |
| Flexural Strength (Yield)  | 6300 psi                | 43.4 MPa           | ASTM D790   |

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (73°F (23°C))   | 0.68 ft·lb/in           | 36 J/m             | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C)) | 22 ft·lb/in             | 1200 J/m           | ASTM D4812  |
| Gardner Impact                      | 130 in·lb               | 14.7 J             | ASTM D3029  |

| Hardness                     | Nominal Value (English) | Nominal Value (SI) | Test Method |
|------------------------------|-------------------------|--------------------|-------------|
| Durometer Hardness (Shore D) | 73                      | 73                 | ASTM D2240  |

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load |                         |                    | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed     | 221 °F                  | 105 °C             |             |
| 264 Psi (1.8 Mpa), Unannealed     | 136 °F                  | 57.8 °C            |             |

| Flammability | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------|-------------------------|--------------------|-------------|
| Flame Rating | HB                      | HB                 | UL 94       |

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| Injection               | Nominal Value (English)         | Nominal Value (SI)            |
|-------------------------|---------------------------------|-------------------------------|
| Drying Temperature      | 200 °F                          | 93 °C                         |
| Drying Time             | 2.0 to 3.0 hr                   | 2.0 to 3.0 hr                 |
| Rear Temperature        | 390 to 400 °F                   | 199 to 204 °C                 |
| Middle Temperature      | 400 to 410 °F                   | 204 to 210 °C                 |
| Front Temperature       | 410 to 420 °F                   | 210 to 216 °C                 |
| Nozzle Temperature      | 420 to 430 °F                   | 216 to 221 °C                 |
| Mold Temperature        | 115 to 140 °F                   | 46 to 60 °C                   |
| Back Pressure           | 20.0 to 50.0 psi                | 0.138 to 0.345 MPa            |
| Screw Speed             | 100 to 150 rpm                  | 100 to 150 rpm                |
| Clamp Tonnage           | 2.0 to 3.0 tons/in <sup>2</sup> | 2.8 to 4.1 kN/cm <sup>2</sup> |
| Screw L/D Ratio         | 20.0:1.0                        | 20.0:1.0                      |
| Screw Compression Ratio | 2.0:1.0                         | 2.0:1.0                       |

### Notes

These are typical property values not to be construed as specification limits.